



The U.S. Attorney General has determined that the publication of this periodical is necessary in the transaction of the public business required by the Department of Justice. Information, instruction, and disclaimers are published in the January issues.

– JANUARY 2012 –

– INTELLIGENCE ALERT –

**1-(5-FLUOROPENTYL)-3-(1-NAPHTHOYL)INDOLE (AM2201)
SEIZED IN FLORIDA**

The Broward County Sheriff's Office (BSO) Regional Crime Laboratory (Fort Lauderdale, Florida) recently received several submissions from a large drug case that included three dark ziplock plastic bags labeled "KUSH Pot Pourri" (See Photo 1). The packaging label stated that it does not contain any illegal chemical, is for incense purposes only, and not intended for human consumption. The ziplock bags contained plant material that had a sweet odor (See Photo 2). Analysis of the plant material by microscopic examination and Duquenois-Levine color test was negative for marijuana. Analysis by GC/MS indicated the presence of 1-(5-fluoropentyl)-3-(1-naphthoyl)indole (AM2201). Since AM2201 was not a controlled substance under Florida or Federal law at the time of the analysis, confirmatory analysis was not performed. This is the first submission of AM2201 to the BSO Regional Crime Laboratory.

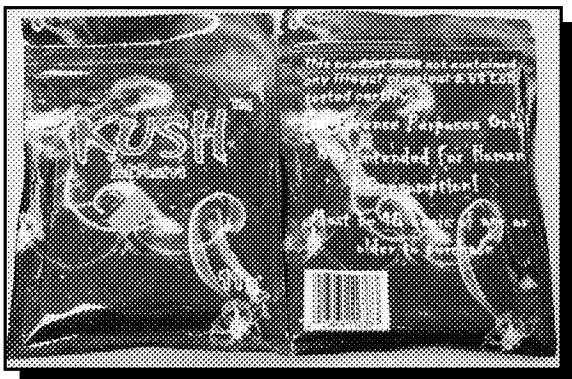


Photo 1

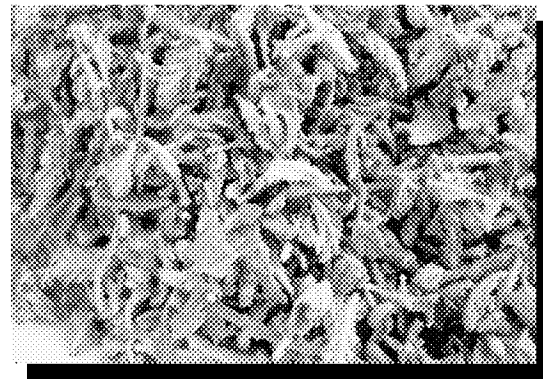


Photo 2

– INTELLIGENCE ALERT –

**HEROIN AND COCAINE CONCEALED INSIDE A WHEELCHAIR SEIZED IN
NEW YORK, NEW YORK**

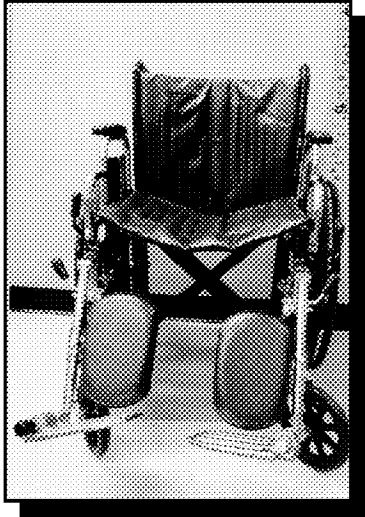


Photo 3

The DEA Northeast Laboratory (New York, New York) recently received a submission consisting of a wheelchair (See Photo 3), suspected to contain heroin. The exhibit was seized by United States Customs and Border Protection officers at LaGuardia International Airport (no further details). After the wheelchair was disassembled, it was found that the tubes contained small pellets of tan colored powder. Due to the differences found while screening the exhibit by GC/MS, the exhibit was split into two exhibits. Analysis the first exhibit (total net mass 1394 grams) by GC/FID, FTIR, and GC/MS identified 92.3% heroin hydrochloride. An identical analysis of the second exhibit (total net mass 907.6 grams) identified 66.2% cocaine hydrochloride and phenyltetrahydroimidazothiazole. The Northeast Laboratory routinely receives heroin and cocaine in various containers, but this is the first time cocaine or heroin was concealed in a wheelchair.

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– INTELLIGENCE ALERT –

“LIQUID” COCAINE SEIZED AT MIAMI INTERNATIONAL AIRPORT

The DEA Southeast Laboratory (Miami, Florida) recently received an exhibit containing five plastic bags each containing a thick, white liquid, suspected cocaine. United States Customs and Border Protection officers seized the exhibit at Miami International Airport from a flight originating in Guayaquil, Ecuador (no further details). The plastic bags were concealed within a styrofoam cooler packed inside three heat sealed pieces of frozen seafood (See Photos 4-5). Analysis of the white liquid (total net mass 360.2 grams; total net volume 298 milliliters) by GC/FID, GC/MS, and FTIR identified 52.1% cocaine hydrochloride. The Southeast Laboratory has encountered samples of “liquid” cocaine hydrochloride in the past.

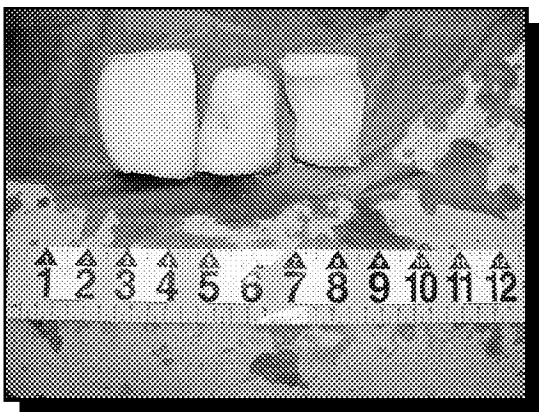


Photo 4



Photo 5

– INTELLIGENCE ALERT –

PINK COCAINE HYDROCHLORIDE SEIZED IN PHOENIX, ARIZONA

The DEA South Central Laboratory (Dallas, Texas) recently received an exhibit that contained a ziplock plastic bag of pink powder (See Photo 6), suspected cocaine. The exhibit was seized by DEA special agents in Phoenix, Arizona (no further details). Analysis of the pink powder (total net mass 0.72 grams) by GC/FID, GC/MS, FTIR, and NMR identified 28.7% cocaine hydrochloride. This is the first submission of pink cocaine hydrochloride to the South Central Laboratory.

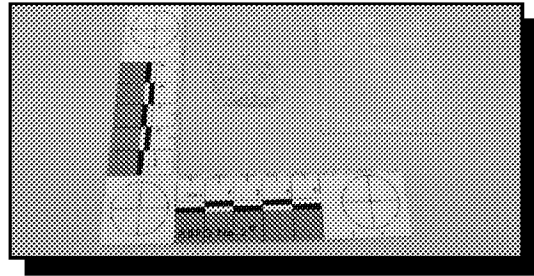


Photo 6

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– INTELLIGENCE ALERT –

ADULTERATED XIA GU CAO BEVERAGE MIX IN SACRAMENTO, CALIFORNIA

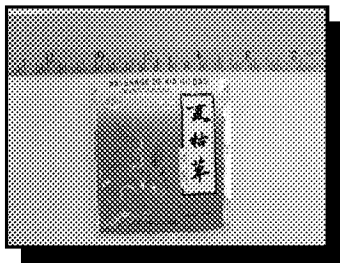


Photo 7

The DEA Western Laboratory (San Francisco, California) recently received one package of Xia Gu Cao beverage mix. The exhibit was surrendered to DEA agents in Sacramento, California (no further details). The beverage mix package appeared to be a legitimate herbal beverage mix from China (See Photo 7). However, a close visual examination revealed orange colored particles in the beverage mix (See Photos 8-9). Analysis of the beverage mix (total net mass 1.2 grams) by HPLC, FTIR, GC/MS, and NMR identified 0.82% 3,4-methylenedioxy-methamphetamine (MDMA) (calculated as the hydrochloride), ketamine, and sucrose. This is the first submission of an adulterated herbal beverage mix to the Western Laboratory.



Photo 8

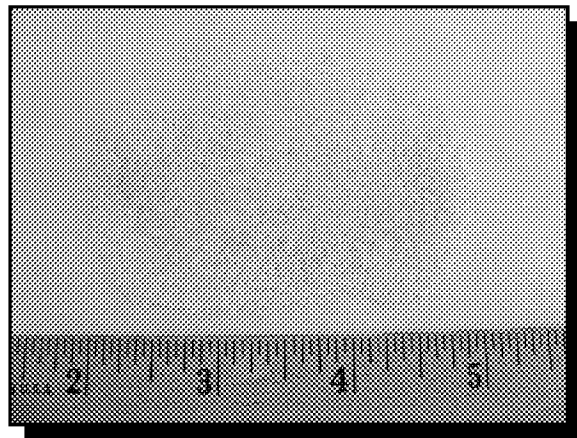


Photo 9

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– SCHEDULING UPDATE –

[Editor's Preface: The following notice has been edited for Microgram Bulletin. See the Federal Register: December 12, 2011 (Volume 76, Number 238) (Proposed Rules) (Pages 77330-77360) for the complete text.]

DEPARTMENT OF JUSTICE

Drug Enforcement Administration

21 CFR Part 1308

[Docket No. DEA-333]

Schedules of Controlled Substances: Placement of Carisoprodol Into Schedule IV

AGENCY: Drug Enforcement Administration, Department of Justice.

ACTION: Final rule.

SUMMARY: With the issuance of this final rule, the Administrator of the Drug Enforcement Administration (DEA) places the substance carisoprodol, including its salts, isomers, and salts of isomers, whenever the existence of such salts, isomers, and salts of isomers is possible, into Schedule IV of the Controlled Substances Act (CSA). This action is pursuant to the CSA which requires that such actions be made on the record after opportunity for a hearing. The decision of the Administrator is reprinted in its entirety below.

DATES: Effective Date: January 11, 2012.

FOR FURTHER INFORMATION CONTACT: Rhea D. Moore, Drug Enforcement Administration, 8701 Morrisette Drive, Springfield, Virginia 22152; Telephone (202) 307-5268.

SUPPLEMENTARY INFORMATION:

ALJ Docket No. 10-46

Background

This is a proceeding under 21 U.S.C. 811(a) for the issuance of a rule placing carisoprodol in schedule IV of the Controlled Substances Act (CSA). Under this provision, "the Attorney General may, by rule," add a "drug or other substance" to one of the five schedules of controlled substances, "if he * * * finds that such drug or other substance has a potential for abuse, and * * * makes with respect to such drug or other substance the findings prescribed by [21 U.S.C. 812(b)] for the schedule in which such drug is to be placed." 21 U.S.C. 811(a). However, a rule made under this provision "shall be made on the record after opportunity for a hearing pursuant to the rulemaking procedures prescribed by subchapter II of chapter 5 of Title 5."

"[W]ith respect to each drug * * * proposed to be controlled," the CSA requires that the Attorney General consider eight factors in making the findings required under both subsections 811(a) and 812(b). These are:

- (1) [The drug's] actual or relative potential for abuse.
- (2) Scientific evidence of its pharmacological effect, if known.
- (3) The state of current scientific knowledge regarding the drug or other substance.
- (4) Its history and current pattern of abuse.
- (5) The scope, duration, and significance of abuse.
- (6) What, if any, risk there is to the public health.
- (7) Its psychic or physiological dependence liability.
- (8) Whether the substance is an immediate precursor of a substance already controlled under this subchapter.

21 U.S.C. 811(c).

However, “before initiating proceedings * * * to control a drug * * * and after gathering the necessary data,” the Attorney General is required to “request from the Secretary a scientific and medical evaluation, and his recommendations, as to whether such drug * * * should be controlled.” The statute further provides that “[i]n making such evaluation and recommendations, the Secretary shall consider the Factors listed in paragraphs (2), (3), (6), (7), and (8) of subsection (c) * * * and any scientific or medical considerations involved in paragraphs (1), (4), and (5) of such subsection. The recommendations of the Secretary shall include recommendations with respect to the appropriate schedule, if any, under which such drug * * * should be listed.”

Finally, “[t]he recommendations of the Secretary to the Attorney General shall be binding as to such scientific and medical matters, and if the Secretary recommends that a drug * * * not be controlled, the Attorney General shall not control the drug * * *. If the Attorney General determines that these facts and all other relevant data constitute substantial evidence of potential for abuse such as to warrant control * * * he shall initiate proceedings for control * * * under subsection (a) of this section.”

Procedural History

Pursuant to section 811(b), in March 1996, the Drug Enforcement Administration (DEA) requested from the Department of Health and Human Services (HHS) a scientific and medical evaluation of carisoprodol, and a recommendation as to whether it should be controlled. In February 1997, however, the U.S. Food and Drug Administration’s (FDA) Drug Abuse Advisory Committee concluded that the then-available data did not support controlling carisoprodol.

Thereafter, at the direction of the National Institute on Drug Abuse (NIDA) and the College of Problems of Drug Dependence (CPDD), additional pharmacological studies of carisoprodol’s abuse liability were conducted. In the meantime, DEA gathered additional new data on actual abuse and law enforcement encounters involving the drug, as well as other information, which it sent to HHS on November 14, 2005. FDA also acquired new data from the Drug Abuse Warning Network (DAWN), the National Survey on Drug Use and Health (NSDUH), Florida Medical Examiners Commission reports, FDA’s Adverse Event Reporting System, as well as other information from a variety of sources.

On October 6, 2009, HHS concluded its review of the evidence pertaining to the eight factors set forth in 21 U.S.C. 811 and recommended that carisoprodol be placed in schedule IV. Thereafter, on November 17, 2009, DEA issued a Notice of Proposed Rulemaking, which proposed placing carisoprodol in schedule IV. Therein, DEA invited all persons to submit written comments or objections to the proposed rule; DEA also notified “interested persons” of their right to request a hearing.

DEA received seventeen comments on the proposed rule; sixteen of the commenters (which included law enforcement officials, medical professionals, and state regulators) supported the proposed rulemaking.^{1\} One entity, Meda Pharmaceuticals, Inc. (Meda), which manufactures the branded drug Soma, objected to the proposed rule on the ground that the “the administrative record does not include substantial and reliable evidence of potential for abuse sufficient to warrant scheduling carisoprodol and because the proposal gives inadequate weight to the negative impact on patient care of scheduling carisoprodol.” Meda also requested a hearing. On March 21, 2010, I granted Meda’s request and assigned the matter to the Agency’s Office of Administrative Law Judges (ALJ).

[^{1\} None of the commenters raised any issue as to the various Regulatory Certifications contained in the Notice of Proposed Rulemaking. See 74 FR at 59111. One commenter, which represents wholesale distributors, requested that if the proposed rule is finalized, its effective date be set at 120 days from the date of publication to provide adequate time to comply with various regulations.]

Following pre-hearing procedures, an ALJ conducted a hearing on July 6, 8, and 9, as well as on August 3-6, 2010. At the hearing, both the Government and Meda elicited the testimony of witnesses and introduced various documents into evidence. Thereafter, both the Government and Meda filed briefs containing their proposed findings of fact and conclusions of law.

[Editor’s Note: See the Federal Register for the complete ALJ’s recommended decision and ruling on the binding nature of the FDA’s scientific and medical evaluation, as well as the complete findings of fact including a detailed discussion of the eight factor evaluation considered by DEA in the scheduling decision.]

Regulatory Requirements

[Editor's Note: See the Federal Register for regulatory requirements.]

Regulatory Analyses

[Editor's Note: See the Federal Register for regulatory analyses.]

List of Subjects in 21 CFR Part 1308

Administrative practice and procedure, Drug traffic control, Reporting and recordkeeping requirements. Narcotics, Prescription drugs.

Under the authority vested in the Attorney General by section 201(a) of the CSA (21 U.S.C. 811(a)), and delegated to the Administrator of the Drug Enforcement Administration pursuant to 28 CFR 0.100, 21 CFR part 1308 is amended to read as follows:

PART 1308--SCHEDULES OF CONTROLLED SUBSTANCES

1. The authority citation for part 1308 continues to read as follows:

Authority: 21 U.S.C. 811, 812, 871(b), unless otherwise noted.

2. Section 1308.14 is amended by redesignating paragraphs (c)(5) through (c)(52) as paragraphs (c)(6) through (c)(53) and adding a new paragraph (c)(5) to read as follows:

Sec. 1308.14 Schedule IV.

* * * * *

(c) * * *

(5) Carisoprodol8192

* * * * *

Dated: November 18, 2011.

Michele M. Leonhart,
Administrator.

[FR Doc. 2011-31542 Filed 12-9-11; 8:45 am]

BILLING CODE 4410-09-P

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– SCHEDULING UPDATE –

[Editor's Preface: The following notice has been edited for Microgram Bulletin. See the Federal Register: December 15, 2011 (Volume 76, Number 241) (Rules and Regulations) (Pages 77895-77899) for the complete text.]

DEPARTMENT OF JUSTICE

Drug Enforcement Administration

21 CFR Part 1308

[Docket No. DEA-354]

Schedules of Controlled Substances: Placement of Ezogabine Into Schedule V

AGENCY: Drug Enforcement Administration, Department of Justice.

ACTION: Final rule.

SUMMARY: With the issuance of this final rule, the Administrator of the Drug Enforcement Administration (DEA) places the substance ezogabine, including its salts, isomers, and salts of isomers whenever the existence of such salts, isomers, and salts of isomers is possible, into Schedule V of the Controlled Substances Act (CSA).

DATES: Effective date: December 15, 2011.

FOR FURTHER INFORMATION CONTACT: Rhea D. Moore, Office of Diversion Control, Drug Enforcement Administration, 8701 Morrisette Drive, Springfield, Virginia 22152; Telephone (202) 307-7165.

SUPPLEMENTARY INFORMATION:

Legal Authority

The DEA implements and enforces Titles II and III of the Comprehensive Drug Abuse Prevention and Control Act of 1970, often referred to as the Controlled Substances Act and the Controlled Substances Import and Export Act (21 U.S.C. 801-971), as amended (hereinafter, "CSA"). The implementing regulations for these statutes are found in Title 21 of the Code of Federal Regulations (CFR), parts 1300 to 1321. Under the CSA, controlled substances are classified in one of five schedules based upon their potential for abuse, their currently accepted medical use, and the degree of dependence the substance may cause, 21 U.S.C. 812. The initial schedules of controlled substances by statute are found at 21 U.S.C. 812(c) and the current list of scheduled substances is published at 21 CFR Part 1308.

Pursuant to 21 U.S.C. 811(a)(1), the Attorney General may, by rule, "add to such a schedule or transfer between such schedules any drug or other substance if he (A) Finds that such drug or other substance has a potential for abuse, and (B) makes with respect to such drug or other substance the findings prescribed by subsection (b) of section 812 of this title for the schedule in which such drug is to be placed * * *" Pursuant to 28 CFR 0.100(b), the Attorney General has delegated this scheduling authority to the Administrator of DEA.

The CSA provides that scheduling of any drug or other substance may be initiated by the Attorney General (1) On his own motion; (2) at the request of the Secretary of HHS, or (3) on the petition of any interested party, 21 U.S.C. 811(a). This action is based on a recommendation from the Assistant Secretary for Health of the Department of Health and Human Services (HHS) and on an evaluation of all other relevant data by DEA. This action imposes the regulatory controls and criminal sanctions of Schedule V on the manufacture, distribution, dispensing, importation, and exportation of ezogabine and products containing ezogabine.

Pursuant to 21 CFR 1308.44(e), the Administrator of DEA may issue her final order "[I]f all interested persons waive or are deemed to waive their opportunity for the hearing or to participate in the hearing." As no requests for a hearing were filed on this proposed scheduling action, all interested persons are deemed to have waived their

opportunity for a hearing pursuant to 21 CFR 1308.44(d), and the Administrator may issue her final order without a hearing.

Ezogabine is a new drug with a novel mechanism of action for the treatment of partial onset seizures. Because ezogabine is a new drug with possible immediate medical application to a life-threatening illness not always treatable with medications currently available and because it may not be prescribed in the United States until this final rulemaking action is in effect and the subsequent requirements that result from this final action are satisfied, the Administrator hereby finds that it is in the interest of public health to forego the 30 day period prior to this final rule taking effect. This will impose no hardship on any interested party and is responsive to comments intended to facilitate the availability of ezogabine as soon as possible for that population of people suffering from seizures that may benefit from treatment with ezogabine. Therefore, in accordance with this finding of conditions of public health and of good cause to waive the 30 day period and pursuant to 21 CFR 1308.45 and 5 U.S.C. 553(d)(3), this final rule is effective upon publication.

Background

Ezogabine, known chemically as N-[2-amino-4-(4-fluorobenzylamino)-phenyl]-carbamic acid ethyl ester, is a new chemical substance with central nervous system depressant properties and is classified as a sedative-hypnotic. Pharmacological studies indicate that ezogabine primarily acts as a ligand at ion-gated channels in the brain to enhance potassium currents mediated by neuronal KCNQ (Kv7) channels. Additionally, ezogabine indirectly enhances the gamma-aminobutyric acid (GABA) mediated neurotransmission. On June 10, 2011, the Food and Drug Administration (FDA) approved a New Drug Application (NDA) for ezogabine as an adjunct treatment of partial onset seizures, to be marketed under the trade name Potiga[supreg].\1\

[1\ http://www.accessdata.fda.gov/drugsatfda_docs/nda/2011/022345Orig1s000TOC.cfm; as of July 21, 2011.]

Determination To Schedule Ezogabine

Pursuant to 21 U.S.C. 811(a), proceedings to add a drug or substance to those controlled under the CSA may be initiated by request of the Secretary of HHS. On January 12, 2011, HHS provided DEA with a scientific and medical evaluation document prepared by FDA entitled “Basis for the Recommendation for Control of Ezogabine in Schedule V of the Controlled Substances Act.” Pursuant to 21 U.S.C. 811(b), this document contained an eight-factor analysis of the abuse potential of ezogabine as a new drug, along with HHS’ recommendation to control ezogabine under Schedule V of the CSA. In response, DEA conducted an eight-factor analysis of ezogabine’s abuse potential pursuant to 21 U.S.C. 811(c).

Following analysis, the Administrator of DEA published a Notice of Proposed Rulemaking entitled “Schedules of Controlled Substances: Placement of Ezogabine into Schedule V” on October 21, 2011 (76 FR 65424), which proposed placement of ezogabine into Schedule V of the CSA.

[Editor’s Note: See the Federal Register for a brief summary of each factor as analyzed by HHS and DEA, and as considered by DEA in the scheduling decision.]

Requests for a Hearing and Comments

[Editor’s Note: See the Federal Register for comments received and DEA’s response to said comments.]

Scheduling Conclusion

Based on consideration of the scientific and medical evaluation and accompanying recommendation of HHS, and based on DEA’s consideration of its own eight-factor analysis, DEA finds that these facts and all relevant data constitute substantial evidence of potential for abuse of ezogabine. As such, DEA will schedule ezogabine as a controlled substance under the CSA.

Determination of Appropriate Schedule

The CSA establishes five schedules of controlled substances known as Schedules I, II, III, IV, and V. The statute outlines the findings required to place a drug or other substance in any particular schedule, 21 U.S.C. 812(b). After

consideration of the analysis and recommendation of the Assistant Secretary for Health of HHS and review of all available data, the Administrator of DEA, pursuant to 21 U.S.C. 812(b)(5), finds that:

- (1) Ezogabine has a low potential for abuse relative to the drugs or other substances in Schedule IV. The overall abuse potential of ezogabine is comparable to the Schedule V substances such as pregabalin and lacosamide;
- (2) Ezogabine has a currently accepted medical use in treatment in the United States. Ezogabine was approved for marketing by FDA as an adjunct treatment of partial onset seizures; and
- (3) Abuse of ezogabine may lead to limited physical dependence or psychological dependence relative to the drugs or other substances in Schedule IV.

Based on these findings, the Administrator of DEA concludes that ezogabine, including its salts, isomers and salts of isomers, whenever the existence of such salts, isomers, and salts of isomers is possible, warrants control in Schedule V of the CSA (21 U.S.C. 812(b)(5)).

Requirements for Handling Ezogabine

[Editor's Note: See the Federal Register for the requirements for handling ezogabine.]

Regulatory Analyses

[Editor's Note: See the Federal Register for regulatory analyses.]

List of Subjects in 21 CFR Part 1308

Administrative practice and procedure, Drug traffic control, Reporting and recordkeeping requirements.

For the reasons set out above, 21 CFR Part 1308 is amended as follows:

PART 1308--SCHEDULES OF CONTROLLED SUBSTANCES

1. The authority citation for 21 CFR Part 1308 continues to read as follows:

Authority: 21 U.S.C. 811, 812, 871(b), unless otherwise noted.

2. Section 1308.15 is amended by redesignating paragraphs (e)(1) and (2) as paragraphs (e)(2) and (3), and adding a new paragraph (e)(1) to read as follows:

Sec. 1308.15 Schedule V.

* * * * *

(e) * * *

(1) Ezogabine [N-[2-amino-4-(4-fluorobenzylamino)-phenyl]-carbamic acid ethyl ester]-2779

* * * * *

Dated: December 8, 2011.

Michele M. Leonhart,
Administrator.

[FR Doc. 2011-32172 Filed 12-14-11; 8:45 am]

BILLING CODE 4410-09-P

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SELECTED REFERENCES

[The Selected References section is a compilation of recent publications of presumed interest to forensic chemists. Unless otherwise stated, all listed citations are published in English. Abbreviated mailing address information duplicates that which is provided by the abstracting service. Patents and Proceedings are reported only by their *Chemical Abstracts* citation number. For full text copies of any of the articles listed, you may email the DEA Library at dea.library@usdoj.gov]

1. Bodnar W, Melissa A, McGuffin VL, Smith RW. **Forensic analysis of Salvia divinorum using multivariate statistical procedures. Part I: discrimination from related Salvia species.** *Analytical and Bioanalytical Chemistry* 2012;402(2):833-842. [Editor's Notes: Salvinorin A, the active compound in Salvia divinorum, was extracted from Salvia divinorum plant leaves with dichloromethane. Four additional Salvia species (Salvia officinalis, Salvia guaranitica, Salvia splendens, and Salvia nemorosa) were extracted using the same procedure. All of the extracts were analyzed by GC/MS, and differentiation of Salvia divinorum from the other species was accomplished using principle component analysis (PCA) and visual comparison of the total ion chromatograms. Contact: Department of Chemistry, Michigan State University, East Lansing, MI 48824, USA.]
2. Choodum A, Nic Daeid N. **Rapid and semi-quantitative presumptive tests for opiate drugs.** *Talanta* 2011;86:284-292. [Editor's Notes: Digital image analysis was applied to the products of color tests for opiates. Adobe® Photoshop® was used for color analysis to obtain analytical data in to form of a Red Green Blue (RGB) value. Calibration curves were developed for morphine, codeine, and heroin hydrochloride and the semi-quantitative results had good agreement with the GC quantification results obtained for the samples analyzed. Contact: Department of Applied Science, Faculty of Science, and Trace Analysis and Biosensor Research Center, Prince of Songkla University, Songkla, Thailand 90112.]

Additional References of Possible Interest:

1. Bijlsma L, Sancho JV, Hernandez F, Niessen WMA. **Fragmentation pathways of drugs of abuse and their metabolites based on QTOF MS/MS and MS^E accurate-mass spectra.** *Journal of Mass Spectrometry* 2011;46(9):865-875. [Editor's Notes: The fragmentation pathways of several classes of drugs of abuse (cannabinoids, ketamine, amphetamine and amphetamine-type stimulants, cocaine, and opiates) and their related substances has been studied. Accurate-mass spectra of 37 drugs of abuse and related compounds were obtained using liquid chromatography-quadrupole time-of-flight mass spectrometry, performing both MS/MS and MS^E experiments. Structures of fragment ions were proposed for several drugs of abuse. Contact: Research Institute for Pesticides and Water, University Jaume I, Castellon, Spain.]
2. Meyer MR, Maurer HH. **Current status of hyphenated mass spectrometry in studies of the metabolism of drugs of abuse, including doping agents.** *Analytical and Bioanalytical Chemistry* 2012;402(1):195-208. [Editor's Notes: Presents title review. Contact: Department of Experimental and Clinical Toxicology, Institute of Experimental and Clinical Pharmacology and Toxicology, Saarland University, Homburg (Saar) 66421, Germany.]

3. Ortiz RS, Mariotti KC, Schwab NV, Sabin GP, Rocha WFC, de Castro EVR, Limberger RP, Mayorga P, Bueno MIMS, Romao W. **Fingerprinting of sildenafil citrate and tadalafil tablets in pharmaceutical formulations via X-ray fluorescence (XRF) spectrometry.** Journal of Pharmaceutical and Biomedical Analysis 2011;58:7-11. [Editor's Notes: Presents title study. Contact: Rio Grande do Sul Technical and Scientific Division, Brazilian Federal Police, Porto Alegre, RS 90160-093, Brazil.]
4. Pal R, Megharaj M, Kirkbride KP, Heinrich T, Naidu R. **Biotic and abiotic degradation of illicit drugs, their precursor, and by-products in soil.** Chemosphere 2011;85(6):1002-1009. [Editor's Notes: Presents title study. Contact: Centre for Environmental Risk Assessment and Remediation, University of South Australia, Mawson Lakes, Adelaide 5095, Australia.]
5. Tyrkkoe E, Pelander A, Ojanperae I. **Differentiation of structural isomers in a target drug database by LC/Q-TOFMS using fragmentation prediction.** Drug Testing and Analysis 2010;2(6):259-270. [Editor's Notes: Presents title study. Contact: Department of Forensic Medicine, University of Helsinki, FI-00014 Helsinki, Finland.]

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THE DEA FY 2012 STATE AND LOCAL FORENSIC CHEMISTS SEMINAR SCHEDULE

The FY 2012 schedule for the State and Local Forensic Chemists Seminar is as follows:

March 19-23, 2012
June 11-15, 2012
September 10-14, 2012

The school is open only to forensic chemists working for law enforcement agencies. It is intended for chemists who have completed their agency's internal training program and have also been working on the bench for at least one year. There is no tuition charge. The course is held at the Hyatt Place Dulles North Hotel in Sterling, Virginia (near the Washington/Dulles International Airport). A copy of the application form is reproduced on the last page of this issue of *Microgram Bulletin*. Completed applications should be mailed to the Special Testing and Research Laboratory at 22624 Dulles Summit Court, Dulles, VA 20166. For additional information, email DEA-Forensic.Chemist@usdoj.gov.

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SCIENTIFIC MEETINGS

Title: AAFS 64th Annual Scientific Meeting
Sponsoring Organization: American Academy of Forensic Sciences
Inclusive Dates: February 20-25, 2012
Location: Atlanta Marriott Marquis (Atlanta, GA)
Contact Information: See website
Website: www.aafs.org

Information and Instructions for *Microgram Bulletin*

General Information

Microgram Bulletin and *Microgram Bulletin LE* are monthly newsletters published by the U.S. Drug Enforcement Administration's Office of Forensic Sciences. *Microgram Bulletin* is primarily intended to provide up-to-date content of interest to the forensic community including Drug Scheduling Updates, Safety Alerts, Selective Literature References, Meeting Announcements, Employment Opportunities, The Journal and Textbook Collection Exchange, and Training Opportunities. *Microgram Bulletin LE* is primarily intended to assist and serve forensic scientists concerned with the detection and analyses of suspected controlled substances for forensic/law enforcement purposes. It also features Intelligence Alerts and Briefs, in addition to the content found in *Microgram Bulletin*.

Access to *Microgram Bulletin* and *Microgram Bulletin LE*

Microgram Bulletin is posted at www.dea.gov. *Microgram Bulletin LE* is posted at www.leo.gov in the DEA Special Interest Group (SIG) and the Department of Justice's information exchange website (IDEA). *Microgram Bulletin* and *Microgram Bulletin LE* are available only on the internet.

To receive *Microgram* email notifications or to change your notification preferences, please go to <https://public.govdelivery.com/accounts/USDOJDEA/subscriber/new?>, enter your email address, and follow the instructions. You will be notified by email when a new issue of *Microgram* is posted. The publications are not sent as attachments.

Costs

Access to *Microgram Bulletin* and *Microgram Bulletin LE* is free.

Submissions to *Microgram Bulletin* and *Microgram Bulletin LE*

Microgram Bulletin includes Safety Alerts, Selected Literature References, Meeting Announcements, Employment Opportunities, pertinent sections from the Code of Federal Regulations, columns of topical importance, and similar material of interest to the general forensic community. *Microgram Bulletin LE* will also feature Intelligence Alerts and Briefs, in addition to the content found in *Microgram Bulletin*. Explanatory details for most of the above types of submission are detailed below, and typical examples are published in most issues of *Microgram Bulletin* or *Microgram Bulletin LE*.

All submissions must be in English. Although *Microgram Bulletin LE* is classified as law enforcement sensitive, case sensitive information should not be submitted. All submissions should, whenever possible, be submitted electronically, as straight email or as an PC-compatible Microsoft Word® attachment, to: DEA-Microgram@usdoj.gov. Current versions of Microsoft Word® (defined as having release dates less than 5 years old) should be utilized. If email submission is not possible, submissions may be mailed to: DEA Headquarters; Attn: Office of Forensic Sciences/Microgram Editor; 8701 Morrisette Drive; Springfield, VA 22152. Hard copy mailings should be accompanied by an electronic version on an PC-compatible standard CD-R. **Note that diskettes should be mailed in an irradiation-proof protective sleeve, and the mailing envelope should be marked: "Warning - Contains Electronic Media - Do Not Irradiate."** Note also that mailed submissions may be subject to lengthy handling delays beyond the control of the Office of Forensic Sciences, and electronic media sent through the mail may be destroyed en route by sanitizing procedures, despite protective

measures and written warnings. All submissions should include the following **Contact Information:** The Full Name and Address of Submitting Laboratory or Office, and the Full Name, Phone Number, FAX Number, and Preferred email address of the Submitting Individual.

Safety Alerts are urgent communiqués to the *Microgram Bulletin* readership which give notice of a specific safety issue of particular interest to forensic or crime laboratory personnel, or to law enforcement personnel dealing with controlled substances. They should include a concise synopsis of the incident(s), recommendations (if any), pertinent literature citations (if any are known), and a mechanism for providing feedback (if appropriate).

Selected Literature References is a monthly compilation of reference citations of presumed interest to the *Microgram Bulletin* readership, derived from approximately 7,500 scientific periodicals. The focus of the Selected Literature References is the detection and analysis of suspected controlled substances for forensic/law enforcement purposes. References from clinical and toxicological journals are included only if the material is considered to be of high interest to forensic chemists (for example, contains the mass spectra of an unusual substance that is not known to be published elsewhere). Note that citations from obscure periodicals may be missed, and all *Microgram Bulletin* subscribers are invited to submit citations of interest if they do not appear in *Microgram Bulletin* within three months of their publication. Of particular interest are articles from regional forensic science associations that are unlikely to be noted by any abstracting service. Citations should include a summary sentence and the primary author's contact information.

Meeting Announcements list upcoming meetings of presumed interest to the *Microgram Bulletin* readership. In general, only meetings which are dedicated to forensic chemistry/forensic drug analysis or include a subsection so dedicated will be publicized in *Microgram Bulletin*. Meeting Announcements should include the Formal Title, Sponsoring Organization, Inclusive Dates, Location (City, State, and specific locale), Registration Deadline, Recommended Hotel (include details on special rates and deadlines where applicable), and Contact Individual's Name, Phone Number, and email Address. If available, the URL for the meeting website should also be included in the Announcement.

Employment Opportunities lists job announcements of presumed interest to the *Microgram Bulletin* readership. In general, only jobs with a forensic chemistry/forensic drug analysis focus for Federal, State, or Local Crime Laboratories or Offices will be publicized in *Microgram Bulletin*. Exceptions may be requested and will be considered on a case-by-case basis (for example, an academic position in a Forensic Chemistry Department). Employment Opportunity announcements should include the Formal Title of the Organization, Formal Title of the Laboratory or Office, Position Title, Laboratory or Office Location (City and State), Salary Range, Opening and Closing Dates, Duties, General Requirements, Specialized Requirements (if any), Application Procedures, and the Contact Individual's Name, Phone Number, email Address, and Mailing Address. If available, the URL for the agency's website, and (if available) the specific URL for the job posting should also be included in the Announcement. Employment Opportunities will typically be posted for 3 consecutive months, but not past the application deadline.

The Journal/Textbook Collection Exchange

If any subscriber is interested in donating any forensic or analytical chemistry journal and/or textbook collection to a fellow subscriber or library, *Microgram Bulletin* is willing to list the

offered materials and the associated contact information in a future issue. The general format should follow the example in the January 2003 issue, and should be sent via email to the *Microgram* Editor at: DEA-Microgram@usdoj.gov. Only items for donation (not for sale) will be considered for publication, and donations to libraries should adhere to journal restrictions and/or time limits (if any) on such offers.

Intelligence Alerts and Briefs (*Microgram Bulletin LE* only) are concise synopses of the physical and chemical characteristics of novel and/or interesting exhibits submitted to law enforcement laboratories involved in the detection and analyses of suspected controlled substances for forensic/law enforcement purposes. Alerts have some unusual aspect, such as a novel drug, an atypical formulation, or a new smuggling technique, whereas Briefs are reports of routine analyses (that is, that confirmed what was suspected/expected). Both Alerts and Briefs should include descriptive details adhering to (as appropriate) the following outline:

- What laboratory did the analysis? (Full Name)
- Where is the laboratory located?
- What agency seized the exhibit?
- Where was the exhibit seized?
- Were there any interesting (but non-sensitive) aspects of the seizure?
- What controlled substance was suspected upon submission?
- Detailed physical description (appearance, dimensions, logos, odor, packaging, etc.)
- Quantities (numbers of tablets, packages or bricks, average mass, total net mass, etc.)
- Photos (see additional information, below)
- What techniques were used to analyze the exhibit?
- Actual composition of the exhibit?
- Quantitation data? (if not quantitated, provide a qualitative approximation if possible)
- Adulterants and diluents? (if identified, especially if unusual)
- First seizure of this type? (if not, provide brief details of previous examples)
- Editorial comments? (if any)
- Literature references for unusual submissions? (if needed)

In order to avoid confusion, if uncommon controlled substances are identified, the description should use the full chemical name(s) of the identified substances (if desired, acronyms or street terminology (e.g., “Foxy-Methoxy”, “Nexus”, or “STP”) can be included in parentheses after the full chemical name).

Please provide photographs as attachments and not as images embedded in documents. JPEG images are preferred. Photographs should be of reasonable size. Unless the scale is obvious, photographs of subject exhibit(s) should include either a metric ruled scale or a coin or bill (U.S. currency) to place the exhibit’s size in context.

Selected Intelligence Briefs (*Microgram Bulletin LE* only) are reprinted (with permission) unclassified intelligence briefs of presumed interest to the *Microgram Bulletin LE* readership that have been previously published in restricted or nonrestricted publications or websites that are also dedicated to the detection and analyses of suspected controlled substances for forensic/law enforcement purposes. Selected Intelligence Briefs must be unclassified, and should be a minimum of 1 page and a maximum of 10 pages in length (single spaced at 12 point Times New Roman font, including photos, tables, charts, etc.). All *Microgram Bulletin LE* subscribers

are invited to submit such material, which must include the author's and publisher's contact information.

Requests for *Microgram* and/or *Microgram Bulletin* Archives, 1967 - 2002

All issues of *Microgram* (November 1967 - March 2002) and the first nine issues of its successor *Microgram Bulletin* (April - December 2002) were and continue to be **Law Enforcement Restricted** publications, and are therefore unavailable to the general public. [Note that this restriction includes requests made under the Freedom of Information (FOI) Act.]

However, the entire collection, individual issues, or individual sections of issues (e.g., specific articles) are available to law enforcement affiliated offices and laboratories. Requests from such offices and laboratories must be made on official letterhead and mailed to:

DEA Headquarters
Attn: Office of Forensic Sciences/*Microgram* Editor
8701 Morrisette Drive
Springfield, VA 22152.

Note that requests made via email will not be honored.

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DISCLAIMERS

- 1) All material published in *Microgram Bulletin* and *Microgram Bulletin LE* is reviewed prior to publication. However, the reliability and accuracy of all published information are the responsibility of the respective contributors, and publication in *Microgram Bulletin* and/or *Microgram Bulletin LE* implies no endorsement by the United States Department of Justice or the Drug Enforcement Administration.
- 2) Due to the ease of scanning, copying, electronic manipulating, and/or reprinting, only the posted copies of *Microgram Bulletin* and *Microgram Bulletin LE* at www.leo.gov, the Department of Justice's information exchange website (IDEA), and www.dea.gov are valid. All other copies, whether electronic or hard, are suspect unless verified against the posted versions.
- 3) **WARNING!:** Due to the often lengthy time delays between the actual dates of seizures and their subsequent reporting in *Microgram Bulletin* and/or *Microgram Bulletin LE*, and also because of the often wide variety of seizure types with superficially similar physical attributes, published material cannot be utilized to visually identify controlled substances currently circulating in clandestine markets. **The United States Department of Justice and the Drug Enforcement Administration assume no liability for the use or misuse of the information published in *Microgram Bulletin* and *Microgram Bulletin LE*.**

DEA State and Local Forensic Chemist Seminar Application			
Name: (PRINT NAME EXACTLY AS IT IS TO APPEAR ON CERTIFICATE)		Title:	
Employer:			
Your Office Mailing Address (include city, state, and zipcode):			Length of Service:
Business Telephone: () -	Business Fax: () -	Date of Application:	
Email Address:			
Education			
College or University	Degree	Major	
Please Check Which Techniques or Equipment Are Used in Your Laboratory			
<input type="checkbox"/>	Color Tests	<input type="checkbox"/>	UV
<input type="checkbox"/>	Column Chromatography	<input type="checkbox"/>	IR
<input type="checkbox"/>	Microcrystal Tests	<input type="checkbox"/>	CE
<input type="checkbox"/>	Thin Layer Chromatography	<input type="checkbox"/>	GC/MS
<input type="checkbox"/>	GC	<input type="checkbox"/>	Other (please specify)
<input type="checkbox"/>	HPLC	<input type="checkbox"/>	Other (please specify)
Indicate Analytical Problem(s) Nominee Would Like to Have Covered:			
Choice of Seminar Dates:			
1st Choice:		2nd Choice:	
Laboratory Chief/Director:			
Printed Name: _____		Signature: _____	
Title: _____		Date: _____	
Phone: _____			